APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/396,245	09/15/1999	FRANK LEYMANN	GE998-078	7155

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EXAMINER
TANG, KENNETH

ART UNIT	PAPER NUMBER
2127	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/396,245	LEYMANN ET AL.
	Examiner	Art Unit	
	Kenneth Tang	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 November 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in the response to the Amendment filed on 11/1/04. Applicant's arguments

have been fully considered but were not found to be persuasive.

2.   Claims 1-10 are presented for examination.

Claim Objections

3.   Claims 4-6 are objected as being improper dependent claims. For example, independent

claim 1 is a method claim, while its dependent claim 5 is a data processing program claim.

4.   It is required that claims 4-6 be written in independent form or cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   **Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable by Shigemi et**

al. (hereinafter Shigemi) (US 6,314,434 B1) in view of Davis et al. (hereinafter Davis) (US

5,870,545).

6.   As to claim 1, Shigemi teaches a computerized method for processing of start-conditions

processed by a computer system acting as a Workflow-Management-System (WFMS) or a

computer system with comparable functionality *(col. 19, lines 5-18)*:

-       said WFMS comprising at least one process-model said process-model modeling a

        process comprising one or more process-activities being nodes of an arbitrary graph and

        directed control-connectors of said graph defining a potential control flow within said

        process-model *(col. 8, lines 37-48, Fig. 1, col. 5, lines 11-24)*;

-       said method evaluating, if a target-activity representing a work item of said process may

        be started, by evaluating the truth-value of a start-condition once the truth-values of all

        incoming control-connectors of said target-activity have been posted *(col. 19, lines 17-

        19)*.

-       and said method being further characterized by comprising a timed-evaluation-step, said

        timed-evaluation-step evaluating *(col. 9, line 67, Fig. 4, item 11)*:

        o   if at least a first one of said incoming control-connectors is associated with a

            time-interval *(col. 9, line 67, Fig. 1, Fig. 4, item 11)*

        o   if said time-interval has been met *(col. 9, line 67, Fig. 1, Fig. 4, item 11)*;

        Shigemi teaches that in the affirmative case, said timed-evaluation-step is continuing the

processing to start said target-activity *(col. 19, lines 5-31)* but fails to explicitly teach doing this

even if not all truth-values of said incoming control-connectors have been posted yet.

However, Davis teaches concurrent processing of activities (col. 14, lines 2-8). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to include the

feature of continuing the processing to start said target-activity even if not all truth-values of said

incoming control-connectors have been posted yet because this allows for atomic execution and

full or partial synchronization *(col. 14, lines 1-9)*.

Shigemi also fails to explicitly teach using Boolean values as the truth-values. However,

Davis teaches using Boolean values to control processing of the activities *(col. 12, lines 52-60,*

col. 12, lines 44-51). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to include the feature of having Boolean values as the truth-values because it

provides an indicator of when action needs to take place based on conditions, and therefore,

providing control *(col. 12, lines 48-51)*.

7.   As to claim 2, Davis teaches a method processing of start-conditions:

-    wherein said first incoming control-connector is associated with a commencing-activity,

     the commencing-activity corresponding to one of the process-activities in the process

     model *(see Figure 7, col. 12, lines 44-51, col. 12, lines 24-26, col. 13 lines 10-20. col. 12,*

     lines 18-26);

-    wherein said timed-evaluation-step uses as starting point for said time-interval the point

     in time when said commencing-activity is completed. *(col. 12, lines 24-26, col. 13 lines*

     10-20, and col. 17, lines 53-56, col. 12, lines 44-51).

8.   As to claim 3, Davis teaches a method for processing of start-conditions *(col. 12, lines*

18-26):

- wherein said first incoming control-connector is associated with a path from said

commencing-activity to said target-activity *(see Figure 7, col. 15, lines, 53-67, col. 12,*

lines 44-51, col. 12, lines 24-26, col. 13 lines 10-20).

- said timed-evaluation-step is continuing the processing to start said target-activity, if said

associated path has been traversed *(col. 7, lines 27-35, col. 12, lines 24-26, and col. 13*

lines 10-20);

4.   As to claim 4, it is rejected for the same reasons as stated in the rejections of claims 1-3.

5.   As to claim 5, it is rejected for the same reasons as stated in the rejections of claims 1-3.

In addition, Davis includes a data processing program for execution in a data processing

system comprising software *(see Abstract).*

9.   As to claim 6, it is rejected for the same reasons as stated in the rejections of claims 1-3.

In addition, Davis includes a data processing program for execution in a data processing system

comprising software *(see Abstract).*

10.   As to claims 7-8, they are rejected for the same reasons as stated in the rejections of claim

1.

11.   As to claims 9-10, they are rejected for the same reasons as stated in the rejections of

claims 2-3.

Response to Arguments

12.   Applicant argues on pages 7-8 of the Remarks that allowing for "atomic execution and full or partial synchronization" does not address why this feature would be desirable, so as to provide the necessary motivation for a combination of references.

In response, it is obvious and well known to one of ordinary skill in the art that an atomic operation is beneficial because it increases the integrity of a process. For objective evidence of this assertion, Gawlick et al. (US 4,507,751) teaches an atomic process increasing integrity by requiring all actions to be complete or none of the work would appear to have completed *(col. 4, lines 21-37)*. In addition, Elko et al. (US 5,742,830) discloses 4 advantages and benefits of an atomic execution *(col. 12, lines 49-67 through col. 13, lines 1-7)*.

13.   Applicant argues on page 9 that Davis does not perform a timed-evaluation step and that Davis clearly fails to teach or suggest a mechanism for evaluating start conditions for a given target-activity capable of handling multiple incoming connectors, and thus fails to disclose a timed-evaluation step which continues the processing to start the target-activity even if not all truth-values of the incoming control-connectors have been posted yet.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The

examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
3/9/05

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